

REMARKS

Applicants thank the Examiner for the courtesy extended to Applicants' attorney during the interview held June 22, 2004, in the above-identified application. During the interview, Applicants' attorney explained the presently-claimed invention and why it is patentable over the applied prior art, and discussed other issues raised in the Office Action. The discussion is summarized and expanded upon below.

The present invention relates to a method for producing an ethylene-vinyl alcohol copolymer (EVOH) resin composition.

As described in the specification under "Description of the Related Art" beginning at page 1, line 8, various prior art techniques have been suggested to improve the flexibility, impact resistance, and moldability of EVOH by blending various resins therewith. Among such techniques include that disclosed in JP5-39392¹ (Makio et al), as described in the specification at the paragraph bridging pages 1 and 2, and in JP2000-43038 (Kenji et al), as described in the specification at page 2, lines 4-9. As described therein, both Makio et al and Kenji et al employ the use of an alcohol, which is problematical.

The present invention addresses the problems of the prior art. As recited in above-amended Claim 1, the invention is a method for producing an ethylene-vinyl alcohol copolymer resin composition, said method comprising:

(a) introducing into an extruder an ethylene-vinyl alcohol copolymer having a water content in a range 0.5-70 wt%, based on the total weight of water and copolymer, and melting said ethylene-vinyl alcohol copolymer having a water content;

(b) further introducing into said extruder a liquid component comprising an aqueous solution of a resin, an aqueous dispersion of a resin, an aqueous dispersion of inorganic fine particles, or a mixture thereof;

¹ The Examiner incorrectly lists the number as "...39390."

(c) subjecting said melted ethylene-vinyl alcohol copolymer and said component to melt-kneading in said extruder; and

(d) discharging the resulting ethylene-vinyl alcohol copolymer resin composition from the extruder.

The rejection of Claim 1 under 35 U.S.C. § 102(b) as anticipated by U.S. 5,322,866² (Mayer et al), is respectfully traversed. Claim 1 now contains the limitations of Claim 10, not included in the rejection. Accordingly, it is respectfully requested that the rejection be withdrawn.

The rejection of Claims 1-5 and 9-16 under 35 U.S.C. § 103(a) as unpatentable over Mayer et al, is respectfully traversed. Mayer et al discloses a method in which unprocessed raw starch, biodegradable copolymer powder, lubricant, plasticizer, and water are continuously combined in a twin screw mixer, wherein the resulting mixture is then continuously processed into a blown film (column 2, lines 46-51), and wherein the biodegradable copolymer powder may be EVOH (column 3, line 6ff). However, Mayer et al neither discloses nor suggests adding an aqueous solution or aqueous dispersion to a melted water-containing EVOH in an extruder and mixing. Accordingly, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 6-8 under 35 U.S.C. § 103(a) as unpatentable over Mayer et al, and further in view of Makio et al or Kenji et al, is respectfully traversed. The disclosures and deficiencies of Mayer et al have been discussed above. Neither Makio et al nor Kenji et al, discussed above in connection with their description in the specification herein, remedies these deficiencies. The Examiner relies on Makio et al and Kenji et al for their respective disclosures of inorganic particles. However, even if the particles of Makio et al or Kenji et al were included in the method described in Mayer et al, the result would still not be the

² The Examiner incorrectly lists the number as "532866."

presently-claimed invention. Accordingly, it is respectfully requested that this rejection be withdrawn.

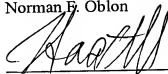
The rejection of Claim 1 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Items (a) and (c) are now moot in view of the above-discussed amendment. With regard to item (b), i.e., the meaning of "fine particles", Applicants' attorney noted during the above-referenced interview that Applicants describe in the specification at page 6, lines 25-26 that the nature of the inorganic fine particles is not specifically limited as long as the particles are dispersible in water, and many different types of particles are disclosed. It is respectfully submitted that such particles are known for use with EVOH copolymers, as described in some of the prior art disclosed in the specification at pages 1-2 thereof, and relied on above by the Examiner. It is respectfully submitted that one skilled in the art would be able to choose applicable fine particles.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

All of the presently pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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